

Indiana Nitrogen Oxides Control Rule

What is the Indiana Nitrogen Oxides Control Rule?

- The Indiana Nitrogen Oxides Control Rule requires certain industries to reduce their nitrogen oxide emissions by 31 percent by May 31, 2004. The reduction is calculated from what emission levels would be in 2007 if the rule were not in place.
- The Indiana Air Pollution Control Board adopted the rule in June of 2001 and the U.S. Environmental Protection Agency approved it in December of 2001.
- The decreased emissions are required between the months of May and September each year starting in 2004.
- The rule was adopted in response to the U.S. Environmental Protection Agency's approval of a federal rule in October of 1998 that required 22 states and the District of Columbia to address the regional transport of ozone through the reduction of nitrogen oxides emissions.

Why is the rule needed?

- Nitrogen oxides, or NOx, are chemical compounds that are byproducts of combustion. Nitrogen oxides are emitted by motor vehicles, industries that use boilers to produce heat or steam and other sources such as furnaces.
- NOx emissions are an ingredient of ground-level ozone or "smog." Ground-level ozone is an air pollutant that damages human health, vegetation and buildings.
- NOx emissions from sources with smokestacks contribute significantly to regional ozone formation because these emissions can travel long distances. About 60 percent of the nitrogen oxide emissions in Indiana come from electric utilities, large industrial boilers and cement kilns.
- Ground-level ozone formed in Indiana also negatively impacts the air quality of states downwind of Indiana.

The Indiana Nitrogen Oxides Control Rule as a solution

- The Indiana Nitrogen Oxides Control Rule:
 - Assists communities across Indiana to attain or maintain U.S. EPA's one-hour health standard for ozone, which is 125 parts per billion (ppb) of nitrogen oxides measured over one hour, for ground-level ozone;
 - Helps to lessen Indiana's contribution to ozone levels in neighboring states;
 - Ensures that various Indiana counties continue their plans for air quality improvements that will lead to state goal of achieving the new, more protective U.S. EPA eight-hour health standard, which is the average of an area's fourth highest reading in each of the three previous years cannot equal or exceed 85 ppb over an eight-hour period for ground-level ozone;
 - Reduces statewide nitrogen oxide emissions by 31 percent; and
 - Helps Hoosiers breathe easier through decreased NOx emissions that reduce the prevalence of ground-level ozone.

What are the major elements of the rule?

- The Indiana Nitrogen Oxides Control Rule:
 - Requires reductions of nitrogen oxide emissions in the following amounts:
 - A 55 percent reduction of NOx emissions from large industrial boilers;
 - A 65 percent reduction of NOx emissions from fossil-fueled fired electric plants; and
 - A 30 percent reduction of NOx emissions from large cement kilns or the use of specified control technologies such as low-NOx burners.
 - Contains a cap and trade emission program that allows industrial facilities to trade unused NOx emission credits, or "allowances," between facilities. This program allows industries to design environmentally friendly, cost-effective approaches to nitrogen oxides reduction goals.
 - Includes incentives to implement energy efficient, renewable sources of power. Examples include solar and wind projects, fuel cells and combined heat and power projects. Indiana is one of only five states to offer this program.
 - Ensures that large emitters of nitrogen oxides will remain in compliance with the rule through a continuous emission monitoring system.

For Additional Information contact: Indiana Department of Environmental Management, Office of Air Quality, Roger Letterman, at (800) 451-6027 ext. 2-8342